

Earthquake and aftershocks: electoral implications of a natural disaster in a multilevel political setting

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Abstract

How do voters react to unexpected events? Research on the electoral consequences of unexpected events in general, and of natural disasters in particular, has been growing in recent years. This paper adds to this literature by examining two questions: do voters' reactions to a particular natural disaster depend on the type of election at stake? And for how long do the effects last? In order to tackle these questions, this paper exploits the aftermath of an 1998 earthquake which hit the Azores archipelago asymmetrically between and within islands. Being a multilevel political setting, voters have since been regularly called to the polls to elect officials at the local, regional, national, and supra-national level, which allows for measuring the extent to which they sanction incumbents at these various realms of government. The results indicate that **TO BE CONTINUED** These findings are of particular relevance to contexts in which the authorities' capacity to deliver relief efforts might be inhibited due to the economic, political or geographical constraints.

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This paper is a work in progress, and feedback is most welcome. The most recent version is available at https://joaocancela.github.io/pdf/earthquake_and_aftershocks.pdf.

1 Introduction

Models of electoral behaviour tend to be put to test in ordinary times. Depending on the preferred type of explanation, turnout and/or vote choice are seen as the product of demographic attributes, personal orientations towards politics, judgements of the quality of candidates, assessments of the economy, institutional factors, and of particular aspects of the election at hand. These variables can interact with each other and their weight might vary depending on the context of the election or its level. But, by and large, models of electoral behaviour assume that there is an element of plausible predictability in how voters should behave in a given election.

Then there are extraordinary times: abrupt changes of circumstances that might make the predictions of electoral models more shaky. Exogenous events or processes affect the entire population or parts of it, in particular, can push explanatory models into stress. Economic shocks, pandemic outbursts or natural disasters are a few examples that. Such events can be relatively short in time, but their impacts may last for long. For instance, while a natural disaster can storm an area for a limited period, the result damage might take several years to repair.

By definition, it is harder to systematically assess the implications of rare events, not only due to their scarcity but to the fact that their impact can be so widespread that disentangling causal effects is close to impossible. In recent years, however, scholars have tried to come to grips with the potential implications of such rare events by looking at instances in which the impact is asymmetrical or by carefully controlling the comparisons. This has generated a literature rich with findings, albeit often in tension with one another.

This paper adds to this literature by studying the impact of an exogenous event – a 1998 earthquake felt in the Azores islands – in the electoral behaviour of those who were affected. It does so by exploiting the asymmetrical levels of physical impact that the earthquake had in five Azorean islands, which ranged from null in entire islands to widespread destruction in some areas of other islands. Using the impact of the earthquake as an independent variable, I examine its impact on the aggregate (sub-municipal) level of voter turnout, on the one hand, and vote share, on the other. Crucially, the analysis is conducted using different types of elections over a long stretch of time, which allows us to disentangle the

The contributions to the are two-fold:

The results suggest that voters were sophisticate to . Contrary to the

The paper is

After reviewing the relevant literature in the next section, I present the case in detail in section ??

Why do we need a further study on this? → most studies focus on a) short-term effects and b) national/local elections. By addressing multi-level we can probe the extent to which electors can behave in a sophisticated way or not.

2 Literature review

Elections The electoral implications of natural disasters are . On the one hand,

Natural disasters are becoming a setting

Examining Italian data from 1993 to 2015, Masiero and Santarossa (2021) show that destructive earthquakes significantly increase the vote share of mayors in affected areas. Their analysis points to the combination of two mechanisms that prop up the magnitude of incumbency advantage. On the one hand, mayors are able to lead relief and recovery efforts; on the other, they benefit from much increased media attention.

(Achen and Bartels, 2016, 19)

Abney and Hill (1966, 2) (Abney and Hill, 1966, 2) Rudolph and Kuhn (2018)

3 The case

In July 9 1998 at 5.19 am a

4 Hypotheses

5 Data collection and processing

6 Analysis

7 Discussion

References

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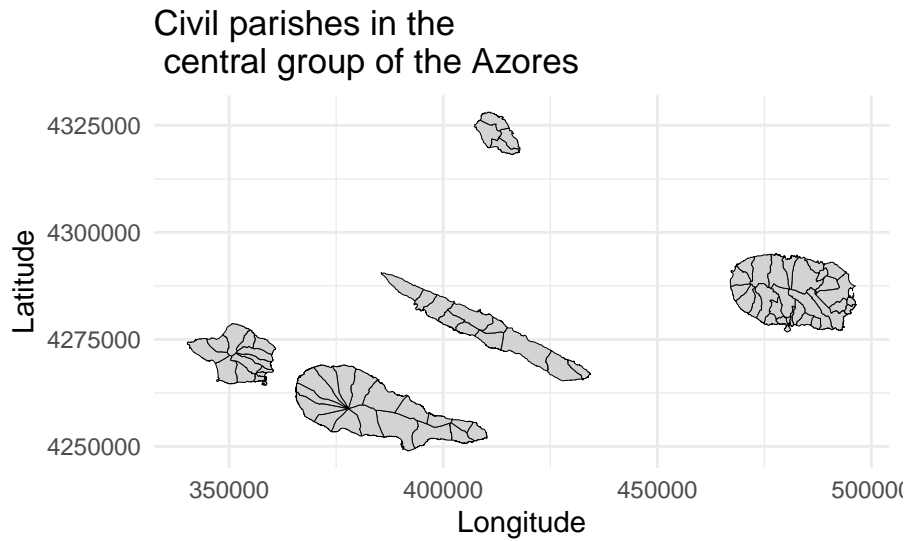


Figure 1: The area under study comprises 75 parishes scattered over 9 municipalities in 5 islands. This map was produced using geographic data made publicly available by the Portuguese Directorate General for Territory (<https://www.dgterritorio.gov.pt/cartografia/cartografia-tematica/caop?language=en>).

Achen, Christopher H and Larry M Bartels. 2016. *Democracy for realists: why elections do not produce responsive government*. Princeton, N.J: Princeton University Press. OCLC: 1022777198.

Masiero, Giuliano and Michael Santarossa. 2021. “Natural disasters and electoral outcomes.” *European Journal of Political Economy* 67:101983.
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Rudolph, Lukas and Patrick M. Kuhn. 2018. “Natural Disasters and Political Participation: Evidence from the 2002 and 2013 Floods in Germany.” *German Politics* 27(1):1–24. Publisher: Routledge _eprint: <https://doi.org/10.1080/09644008.2017.1287900>.
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Appendix 1 – robustness tests